ENTREPRENEURIAL SELF-EFFICACY AND RISK-TAKING PROPENSITY AS ANTECEDENTS TO ENTREPRENEURIAL INTENTIONS: EMPIRICAL EVIDENCE FROM TECHNOLOGY AND VOCATIONAL EDUCATION UNDERGRADUATES

[1]Blessing Nzubechukwu Achugamonye, [2]Ile Chika Madu & [3]Nnaemeka M. Agbo
[1,2]Department of Business Education, Nnamdi Azikiwe University, Awka Anambra State
[3]Department of Industrial Technology Education, Nnamdi Azikiwe University, Awka
[1]nzubeachu@gmail.com [2]cm.ile@unizik.edu.ng [3]nm.agbo@unizik.edu.ng

Abstract
Entrepreneurial intentions among undergraduate students remain a critical concern for policymakers and educators seeking to embed entrepreneurship within higher education curricula. Grounded in Bandura's Social Cognitive Theory and the Theory of Planned Behaviour, this study investigated entrepreneurial self-efficacy and risk-taking propensity as antecedents of entrepreneurial intentions among final-year technology and vocational education undergraduates in public universities in South-East Nigeria. A predictive correlational design was employed, with data drawn from a census of 326 final-year undergraduates during the 2024/2025 academic session. Confirmatory factor analysis indicated an acceptable fit of the measurement model, and the retained constructs demonstrated satisfactory reliability (CR = .697–.867; α = .671–.865), supporting the adequacy of the measures for subsequent analyses. Three hypotheses were tested at $\alpha = 0.05$ using simple and multiple linear regression analyses, executed through the SPSS PROCESS Macro (Version 4). Findings revealed that both entrepreneurial self-efficacy ($\beta = 0.577$, $p < .05$) and risk-taking propensity ($\beta = 0.211$, $p < .05$) significantly and positively predicted entrepreneurial intentions. Jointly, the two variables accounted for a significant proportion of variance in entrepreneurial intentions, with entrepreneurial self-efficacy emerging as the relatively stronger antecedent. These results underscore the salience of psychological capital in shaping entrepreneurial career orientations among technology and vocational education students. Thus, we recommend that entrepreneurship education programmes integrate experiential and simulation-based learning pedagogies designed to strengthen students' self-efficacy and cultivate adaptive risk orientation.

Keywords: Entrepreneurial intentions, Entrepreneurial self-efficacy, risk-taking propensity, Technology and vocational education undergraduates.

Introduction

Entrepreneurship is widely recognised as a critical driver of economic growth, job creation, and innovation, particularly in developing economies such as Nigeria. Against the backdrop of rising graduate unemployment, entrepreneurship education was introduced in tertiary institutions as a strategic response to equip students with the competencies required for self-employment and economic participation (Amaewhule & Wolugbom, 2018; Ladokun et al., 2022). Higher educational institutions have consequently implemented entrepreneurship programmes aimed at cultivating the attitudes, skills, and business knowledge essential for venture creation. Technology and vocational education, as a key vehicle for this mandate, prepares students with both theoretical knowledge and practical competencies for entrepreneurial engagement, encompassing instruction in business principles, management, marketing, finance, and entrepreneurship (Akinkuolie et al., 2024; Ogwunte, 2023). Despite this institutional investment, a significant proportion of graduates fail to translate their exposure to entrepreneurship education into actual entrepreneurial intentions or ventures, underscoring the need to identify the psychological determinants that mediate this gap.

Entrepreneurial intention, an individual's conscious commitment and deliberate plan to start a new business, is widely regarded as the most proximate cognitive antecedent of entrepreneurial behaviour (Moriano et al., 2012). It reflects the degree of passion toward future entrepreneurial action and determines whether an individual will take the foundational step toward becoming an entrepreneur (Ogwunte, 2023). Understanding the factors that shape entrepreneurial intention is therefore essential

for promoting entrepreneurship among undergraduates (Baum & Locke, 2014). Among the various determinants identified in the literature, psychological attributes such as entrepreneurial self-efficacy and risk-taking propensity have received considerable scholarly attention for their capacity to influence motivation, confidence, decision-making, and the willingness to pursue entrepreneurial opportunities (Ahmed et al., 2025; Otache et al., 2024; Sharma et al., 2024).

Entrepreneurial self-efficacy (ESE) refers to an individual's belief in their own ability to successfully perform the tasks associated with starting and managing a business (Pan & Tresirichod, 2025; Piperopoulos & Dimov, 2015). Individuals with high ESE tend to exhibit greater confidence, persistence, and proactive behaviour; attributes essential for entrepreneurial engagement. Empirical studies have consistently established ESE as a strong predictor of entrepreneurial intention across diverse contexts (Newman et al., 2019; Vijeyan et al., 2015; Zhao et al., 2005). Risk-taking propensity, conversely, refers to an individual's dispositional willingness to engage in activities involving uncertain outcomes (Sitkin & Pablo, 1992). Entrepreneurs are characterised by their tolerance of uncertainty and potential failure; accordingly, individuals with high risk-taking propensity are more inclined toward innovative and entrepreneurial behaviour (Ngo & Vu, 2025). Prior studies confirm a positive relationship between risk tolerance and entrepreneurial intention, indicating that those willing to take calculated risks are more oriented toward entrepreneurial careers (Bux & Honglin, 2015; Karabulut, 2016).

This study addressed the gap in understanding how entrepreneurial self-efficacy and risk-taking propensity predict entrepreneurial intentions among technology and vocational eduction undergraduates in public universities in South-East Nigeria. The findings provide actionable insights for educators, policymakers, and stakeholders seeking to enhance entrepreneurship education programmes and promote entrepreneurial activity among graduates. Critically, understanding these predictors enables the design of more effective curricula that not only foster entrepreneurial intentions but also catalyse practical entrepreneurial action, thereby contributing to youth unemployment reduction and the promotion of self-reliance among technology and vocational education graduates in the region.

2. Theoretical Underpinning and Hypotheses Development

This study is jointly anchored in Bandura's (1977, 1986) Social Cognitive Theory (SCT) and Ajzen's (1991) Theory of Planned Behaviour (TPB). SCT posits that behaviour emerges from reciprocal interaction among cognitive factors, behaviour, and the environment — a dynamic Bandura (1986) termed triadic reciprocal determinism. Central to SCT is self-efficacy, defined as one's belief in their capacity to organise and execute actions required to attain designated goals (Bandura, 1997). Applied to the entrepreneurial domain, entrepreneurial self-efficacy (ESE) reflects a student's confidence in their ability to successfully perform the roles and tasks associated with new venture creation, including marketing, innovation, financial management, and team leadership (Chen, Greene, & Crick, 1998; McGee, Peterson, Mueller, & Sequeira, 2009). SCT predicts that students with high ESE perceive entrepreneurship as feasible, invest greater motivational effort, and exhibit resilience against failure; all preconditions for crystallised entrepreneurial intentions.

TPB complements SCT by specifying that intentions — the most proximate cognitive antecedent of behaviour — are a function of attitude toward the behaviour, subjective norms, and perceived behavioural control (PBC), a construct conceptually analogous to self-efficacy (Ajzen, 1991). Krueger and Carsrud (1993) established that entrepreneurial intentions are the strongest predictor of actual entrepreneurial action, making their antecedents a critical research agenda. The integration of SCT and TPB in this study reflects scholarly consensus that multi-theoretic frameworks offer superior predictive power (Luthans & Youssef-Morgan, 2017), as both theories converge in identifying perceived capability and attitudinal dispositions as central drivers of intentional entrepreneurial behaviour.

2.1 Entrepreneurial Self-Efficacy and Entrepreneurial Intentions

Entrepreneurial self-efficacy is one of the most robust and consistently validated predictors of entrepreneurial intentions in the literature. Meta-analytic evidence by Zhao, Seibert, and Hills (2005) established a significant positive relationship between ESE and entrepreneurial intentions (r = .38) even after controlling for personality traits. Liñán and Chen (2009) corroborated this relationship across seven countries, while Farrukh, Wei Ying, and Abdallah Ahmed (2016) confirmed the link among university students. In the Nigerian context, Oyedele, Oyelaran, and Adeyemi (2019) and Inegbenebor (2014) found that students with stronger domain-specific competency beliefs were more inclined toward entrepreneurial career paths. Theoretically, high ESE lowers the perceived difficulty of entrepreneurship, elevates outcome expectancies, and strengthens the utility of entrepreneurial goal commitment — all mechanisms that, within both SCT and TPB, directly amplify entrepreneurial intention. Accordingly, we propose that:

H_1: *Entrepreneurial self-efficacy has a significant positive effect on entrepreneurial intentions among technology and vocational education undergraduates in public universities.*

2.2 Risk-Taking Propensity and Entrepreneurial Intentions

Risk-taking propensity, defined as an individual's dispositional inclination to engage in uncertain, potentially high-reward activities (Sitkin & Pablo, 1992), is theorised as a core attribute of the entrepreneurial personality (Miller, 1983; Brockhaus, 1980). Stewart and Roth's (2001) meta-analysis confirmed that entrepreneurs display significantly higher risk propensity than non-entrepreneurs. Within TPB, risk-taking propensity shapes entrepreneurial attitude: individuals tolerant of ambiguity evaluate the uncertainty inherent in entrepreneurship more positively, thereby strengthening intention (Ajzen, 1991; Veciana, Aponte, & Urbano, 2005). In Nigeria, Gürol and Atsan (2006) and Gbadamosi (2020) demonstrated positive associations between students' risk orientation and intentions to start businesses, while Karimi et al. (2016) found that risk-taking propensity mediated the effect of entrepreneurship education on intention. The socioeconomic uncertainty of the South-East Nigerian context, combined with the region's documented Igbo entrepreneurial cultural heritage (Nwosu, 2017), renders risk-taking propensity a theoretically salient predictor for this population. Thus, we theorize that:

H_2: Risk-taking propensity has a significant positive effect on entrepreneurial intentions among technology and vocational education undergraduates in public universities.

2.3 Joint Predictive Effect and Conceptual Model

Beyond their individual effects, the joint predictive power of ESE and risk-taking propensity is theorised through Luthans et al (2007) psychological capital (PsyCap) framework, which posits that psychological resources interact synergistically to produce motivational outcomes exceeding the contribution of any single component. Within SCT's triadic reciprocal determinism, cognitive self-beliefs (ESE) and affective-dispositional factors (risk-taking) co-regulate each other and the social environment, producing behaviour-specific intentions more robustly than either variable alone. Multivariate studies by Liñán and Chen (2009) and Bae, Qian, Miao, and Fiet (2014) consistently show that combined psychological predictors account for 30–60% of variance in entrepreneurial intentions. Conceptually, we presented ESE and risk-taking propensity as independent antecedents converging on entrepreneurial intention as the criterion variable, with directional paths grounded in both SCT and TPB. Therefore, we hypothesize that:

H_3: *Entrepreneurial self-efficacy and risk-taking propensity jointly have a significant predictive effect on entrepreneurial intentions among technology and vocational education undergraduates in public universities.*

Methods

The study adopted predictive correlational research design. It was conducted in South-East Nigeria using 352 final-year technology and vocational education undergraduates of 2024/2025 academic session from public universities in South-East Nigeria offering technology and vocational

education programmes. Final-year students were selected because they had been fully exposed to the curriculum and are in a better position to demonstrate psychological attributes. Census sampling technique was adopted because the population size was manageable. Therefore, all 326 students were included in the study to ensure comprehensive coverage. Data were collected using both online (Google Forms) and physical administration of the questionnaire. Out of 352 copies of the questionnaire administered, 327 were successfully retrieved, representing a high response rate suitable for analysis. Data collected from the respondents were analyzed using regression analysis. Simple linear regression was used to test the hypotheses on individual predictors while multiple regressions was used to test joint prediction using the Statistical Package for Social Sciences (SPSS) version 25 and SPSS PROCESS Macro version 4. Alternative hypothesis is supported when the p-value was less than 0.05 ($p < 0.05$**)** and not supported if p-value was greater than or equal to 0.05 **(**$p \geq 0.05$**).**

Instrument and Measures

The instrument for data collection was a structured questionnaire adapted from existing validated scales: ESE scale developed by McGee et al (2009) was used to measure entrepreneurial self-efficacy (e.g., I am confident in my abilities to identify new business opportunities), risk-taking propensity measured by general risk-taking propensity scale by Zhang et al (2018) (e.g., I enjoy taking risks in most aspects of my life), while entrepreneurial intention was measured by individual entrepreneurial intent construct scale by Thompson (2009) (e.g., I have a strong desire to become an entrepreneur). The items were measured on a 4-point Likert scale. The results of the confirmatory factor analysis (CFA) and model fit indices are thus presented.

Risk-Taking Propensity (RTP)

Risk-taking propensity was measured using an eight-item scale, which was refined to six items following confirmatory factor analysis (CFA). The measurement model demonstrated an acceptable fit to the data, $\chi^2(10) = 25.560$, $p = .004$, $\chi^2/df = 2.56$, CFI = .994, TLI = .991, and RMSEA = .069. These values satisfy the recommended thresholds for model fit, indicating adequate construct validity. Convergent validity was established with an Average Variance Extracted (AVE) of .521, exceeding the recommended benchmark of .50. Internal consistency reliability was also satisfactory, as evidenced by a Composite Reliability (CR) of .867 and Cronbach's alpha coefficient of .865, both surpassing the minimum acceptable value of .70.

Entrepreneurial Self-Efficacy (ESE)

Entrepreneurial self-efficacy was assessed using an eight-item scale, which was reduced to five items after CFA. The refined model exhibited a good fit to the data, $\chi^2(6) = 14.401$, $p = .025$, $\chi^2/df = 2.40$, CFI = .990, TLI = .984, and RMSEA = .066. These indices indicate satisfactory construct validity. Although the AVE value of .371 was below the conventional threshold of .50, convergent validity was considered acceptable because the CR value (.743) exceeded the recommended criterion of .70, consistent with the recommendation of Fornell and Larcker (1981) that constructs with AVE below .50 may still demonstrate adequate convergent validity when composite reliability is above .60. Furthermore, the scale demonstrated satisfactory reliability, with a Cronbach's alpha coefficient of .741 and a composite reliability coefficient of .743.

Entrepreneurial Intentions (EI)

Entrepreneurial intentions were measured with a nine-item scale, subsequently refined to four items through CFA. The model demonstrated an acceptable fit, $\chi^2(3) = 8.869$, $p = .031$, $\chi^2/df = 2.96$, CFI = .993, TLI = .985, and RMSEA = .078. These statistics indicate adequate factorial validity of the construct. The AVE value (.455) fell slightly below the recommended .50 threshold; however, convergent validity was deemed acceptable because the composite reliability (.769) exceeded the recommended minimum of .70, in line with the guidance of Fornell and Larcker (1981). Reliability

estimates further confirmed the consistency of the scale, with CR = .769 and Cronbach's alpha = .768, both indicating acceptable internal consistency.

Results

H01: Entrepreneurial self-efficacy has a significant positive effect on entrepreneurial intentions among technology and vocational education undergraduates in public universities.

Table 1*: Simple linear regression analysis for the predictive role of entrepreneurial self-efficacy on entrepreneurial intentions*

Model	SS	df	MS	F	B	SE	T	Sig.
Regression	19.930	1	19.930	158.331	.577	.046	12.583	.001
Residual	40.910	325	.126					
Total	60.840	326						

Table 1 indicates that the regression model is statistically significant, F (1, 325) = 158.33, p = .001, indicating that entrepreneurial self-efficacy contributes significantly to the prediction of entrepreneurial intentions. Therefore, the null hypothesis is rejected. Entrepreneurial self-efficacy shows a positive and statistically significant predictive effect on entrepreneurial intentions (B = 0.577, SE = 0.046, t = 12.58, p = .001). This result indicates that increases in students' entrepreneurial self-efficacy are associated with corresponding increases in their entrepreneurial intentions. The strength of the t-value suggests that the observed relationship is stable and unlikely to have occurred by chance. In relation to the hypothesis, the proposition that entrepreneurial self-efficacy significantly predict entrepreneurial intentions is supported by the data. Thus, entrepreneurial self-efficacy is a statistically significant predictor of entrepreneurial intentions among technology and vocational education undergraduates.

H02: Risk-taking propensity has a significant positive effect on entrepreneurial intentions among technology and vocational education undergraduates in public universities.

Table 2*: Simple linear regression analysis for the predictive role of risk-taking propensity on entrepreneurial intentions*

Model	SS	Df	MS	F	B	SE	T	Sig.
Regression	5.582	1	5.582	32.832	.211	.037	5.730	.001
Residual	55.257	325	.170					
Total	60.840	326						

Table 2 indicates that the model is statistically significant, F (1, 325) = 32.83, p< .001, indicating that risk-taking propensity contributes meaningfully to explaining variation in entrepreneurial intentions. Consequently, the null hypothesis is rejected. The unstandardized regression coefficient reveals a positive and significant effect of risk-taking propensity on entrepreneurial intentions (B = 0.211, SE = 0.037, t = 5.73, p< .001). This suggests that undergraduates with higher inclination toward taking calculated risks are more likely to report stronger entrepreneurial intentions. In relation to the hypothesis, the proposition that risk-taking propensity significantly predict entrepreneurial intentions is supported. This underscores risk-taking propensity as a significant psychological attribute influencing entrepreneurial intention formation.

H03: Entrepreneurial self-efficacy and risk-taking propensity jointly have a significant predictive effect on entrepreneurial intentions among technology and vocational education undergraduates in public universities.

Table 3: *Multiple linear regression analysis for the joint predictive role of entrepreneurial self-efficacy and risk-taking propensity attributes on entrepreneurial intentions*

Predictor Variables	B	SE	B	T	P
Constant	0.780	0.195	—	4.00	<.001
Entrepreneurial Self-Efficacy	0.215	0.063	.213	3.42	.001
Risk-Taking Propensity	-0.002	0.033	-.003	-0.07	.945

$R = .690$, $R^2 = .476$, Adjusted $R^2 = .463$, $F (8, 318) = 36.16$, $p < .001$, Durbin–Watson = 2.03
Note. *B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient. Dependent variable = entrepreneurial intentions.*

The results in Table 3 show a multiple linear regression analysis conducted to determine whether entrepreneurial self-efficacy and risk-taking propensity jointly and significantly predict entrepreneurial intentions among technology and vocational education undergraduates. The regression model is statistically significant, $F (8, 318) = 36.16$, $p < .001$, indicating that the combined predictors significantly explain variations in entrepreneurial intentions. The model yielded a multiple correlation coefficient of $R = .69$, with an R^2 of .48 (Adjusted $R^2 = .46$), suggesting that approximately 46% of the variance in entrepreneurial intentions is jointly explained by entrepreneurial self-efficacy and risk-taking propensity. The Durbin–Watson statistic of 2.03 indicates no violation of the independence of errors assumption.

With respect to individual predictors, entrepreneurial self-efficacy ($B = 0.215$, $\beta = .213$, $t = 3.42$, $p = .001$) made a statistically significant positive contribution to entrepreneurial intentions, while risk-taking propensity ($B = -0.002$, $\beta = -.003$, $t = -0.07$, $p = .945$) did not make a statistically significant unique contribution within the joint model. Therefore, the hypothesis that entrepreneurial self-efficacy and risk-taking propensity jointly and significantly predict entrepreneurial intentions among technology and vocational education undergraduates is supported.

Discussion

The findings of this study revealed that entrepreneurial self-efficacy significantly and positively predicted entrepreneurial intentions among technology and vocational education undergraduates in public universities in South-East Nigeria. This indicates that undergraduates who possess greater confidence in their ability to successfully perform entrepreneurial tasks are more likely to develop strong intentions to engage in entrepreneurial activities after graduation. Such confidence enhances their readiness to pursue entrepreneurship as a viable career option, thereby strengthening their entrepreneurial intentions. The finding is consistent with Akhtar et al. (2020), who reported that entrepreneurial self-efficacy significantly enhanced entrepreneurial intentions among university students. The authors emphasized that individuals who believe in their entrepreneurial capabilities are more likely to pursue entrepreneurial careers because they perceive themselves as capable of overcoming business-related challenges. Similarly, Otache et al. (2024) found that entrepreneurial self-efficacy significantly predicted entrepreneurial intentions and strengthened students' readiness to engage in entrepreneurial activities. The finding also agrees with Othman and Mohd Hisam (2020), who reported a significant positive relationship between entrepreneurial self-efficacy and entrepreneurial intention among polytechnic students, irrespective of their level of involvement in entrepreneurship education. This suggests that entrepreneurial self-efficacy is a stable psychological determinant of entrepreneurial intention, reinforcing the present study's finding that entrepreneurial self-efficacy strongly predicts entrepreneurial intentions among undergraduates.

The findings of the study also revealed that risk-taking propensity significantly and positively predicted entrepreneurial intentions among technology and vocational education undergraduates in public universities in South-East Nigeria. This implies that students who are more willing to take calculated risks and tolerate uncertainty are more likely to develop intentions toward entrepreneurial engagement. The finding aligns with Bux and Honglin (2015), who established that risk-taking propensity positively influenced entrepreneurial intentions. Their study indicated that individuals with higher tolerance for uncertainty and risks are more willing to engage in entrepreneurial ventures

despite possible challenges and uncertainties. Likewise, Karabulut (2016) found that risk-taking propensity significantly contributed to entrepreneurial intention among students, particularly in environments characterized by economic uncertainty and competitive labour markets. Similarly, Ojapinwa et al. (2018) found that risk-taking propensity significantly influenced self-employment intentions among students in Lagos State, emphasizing the importance of identifying and nurturing entrepreneurial traits among young people. In the same vein, Ilevbare et al. (2022) reported that risk-taking propensity positively influenced entrepreneurial intentions among Nigerian undergraduates. Their findings underscored the importance of personal disposition toward risk in fostering entrepreneurial aspirations among students. The finding further agrees with Setiawan et al. (2023), who demonstrated that risk-taking propensity positively influenced both entrepreneurial intention and entrepreneurial self-efficacy among students. Students with higher propensity for risk were found to be more confident in their entrepreneurial abilities, which in turn strengthened their entrepreneurial intentions. Likewise, Gikunda and Miriti (2025) reported a positive and statistically significant effect of risk-taking propensity on entrepreneurial intentions among university students in Kenya. Their study recommended the creation of supportive environments that encourage calculated risk-taking in order to strengthen students' entrepreneurial confidence and aspirations. In addition, Aamir et al. (2021) emphasized that supportive university environments strengthen the relationship between risk-taking propensity and entrepreneurial intention by providing students with institutional encouragement and entrepreneurial exposure.

The findings further revealed that entrepreneurial self-efficacy and risk-taking propensity jointly and significantly predicted entrepreneurial intentions among technology and vocational education undergraduates in public universities in South-East Nigeria. The result implies that students who possess strong confidence in their entrepreneurial capabilities alongside a greater willingness to take calculated risks are more likely to develop stronger entrepreneurial intentions. The findings also showed that entrepreneurial self-efficacy exerted a stronger predictive influence than risk-taking propensity, suggesting that belief in one's entrepreneurial competence plays a more dominant role in entrepreneurial intention formation. The finding aligns with previous studies by Akhtar et al. (2020), Otache et al. (2024), Yusof et al. (2018) and Udayanan (2019), all of which reported that higher entrepreneurial self-efficacy enhanced students' intentions to engage in entrepreneurial activities. Similarly, studies by Ojapinwa et al. (2018), Ilevbare et al. (2022) and Setiawan et al. (2023) identified risk-taking propensity as a meaningful motivational factor influencing students' willingness to pursue entrepreneurial opportunities.

The joint significance of entrepreneurial self-efficacy and risk-taking propensity supports the assumptions of the Entrepreneurial Event Model, which posits that entrepreneurial intention is shaped by individuals' perceptions of feasibility and desirability. Entrepreneurial self-efficacy strengthens perceived feasibility by increasing students' confidence in their entrepreneurial abilities, while risk-taking propensity enhances willingness to pursue uncertain but potentially rewarding entrepreneurial opportunities. The combined influence of these psychological attributes therefore increases the likelihood of entrepreneurial intention formation among undergraduates. The findings also suggest that entrepreneurship education programmes should not focus solely on entrepreneurial knowledge and technical skills but should also emphasize psychological empowerment.

Conclusion

Based on the findings of the study, it is concluded that entrepreneurial self-efficacy and risk-taking propensity significantly influence the entrepreneurial intentions of Technology and vocational education undergraduates in universities in South-East Nigeria. The study established that undergraduates who possess stronger confidence in their entrepreneurial abilities and greater willingness to take calculated risks are more likely to develop strong entrepreneurial intentions. Among the two psychological attributes examined, entrepreneurial self-efficacy emerged as the stronger predictor of entrepreneurial intentions, indicating that students' belief in their entrepreneurial competence plays a more dominant role in entrepreneurial intention formation. Risk-taking propensity also demonstrated a significant positive influence, suggesting that students who are more willing to tolerate uncertainty and engage in calculated risks are more inclined toward entrepreneurial pursuits.

The study therefore underscores the importance of strengthening psychological attributes in entrepreneurship education. It highlights the need for experiential and practical learning approaches capable of enhancing students' entrepreneurial confidence, resilience and risk orientation. These findings provide useful insights for educators, curriculum developers and policymakers seeking to promote entrepreneurial intentions, self-reliance and graduate employment generation among university students in Nigeria.

5.3 Implications of the Study

The findings of this study have important implications for entrepreneurship education policy and practice. The strong predictive influence of entrepreneurial self-efficacy suggests that higher education institutions must implement targeted interventions to build students' confidence in their entrepreneurial abilities. By incorporating experiential learning, mentorship programmes, and real-world entrepreneurial tasks, institutions can bolster students' belief in their capacity to succeed, which in turn strengthens their entrepreneurial intentions.

Similarly, the significant role of risk-taking propensity highlights the need for educational programmes to create supportive environments where students feel empowered to take calculated risks. By fostering a mindset that embraces uncertainty, institutions can better prepare students to navigate entrepreneurial challenges. Together, these psychological attributes offer a crucial foundation for entrepreneurial intention formation, underscoring the need for a balanced approach that integrates both psychological readiness and practical entrepreneurial exposure.

References

Aamir, M., Mahmood, G., Mahmood, T., Bakar, A. B., and Khan, I. (2021). *Impact of risk-taking propensity and entrepreneurial attitude on entrepreneurial intent through moderating role of universities. Competitive Social Science Research Journal*, *2*(4), 130–141. cssrjournal.com

Ahmed, I., Ramzan, M. and Usman, M. (2025). Impact of personality traits on entrepreneurial intentions of university students. *JISR management and social sciences and economics*, *8*(2), 167-173

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Akhtar, S., Hongyuan, T., Iqbal, S. and Ankomah, F. Y. N. (2020). Impact of need for achievement on entrepreneurial intentions; mediating role of self-efficacy. *Journal of Asian Business Strategy*, *10*(1), 114–121. https://doi.org/10.18488/journal.1006.2020.101.114.1211

Akinkuolie, A. A., Umoru, T. A. and Ademiluyi, L. F. (2024). Influence of entrepreneurial skills on entrepreneurial intention of business education undergraduates in South-West, Nigeria. *KWASU International Journal of Education (KIJE)*, *4*(1), 206-220.

Amaewhule, W. and Wolugbom, P. (2018). Entrepreneurial marketing and small business success. *Journal of Entrepreneurship and Innovation*, *9*(1), 1-12.

Anwar, I., Thoudam, P. and Saleem, I. (2022). Role of entrepreneurial education in shaping entrepreneurial intention among university students: Testing the hypotheses using mediation and moderation approach. *Journal of Education for Business*, *97*(1), 8-20.

Asante, E. A., and Affum-Osei, E. (2019). Entrepreneurship as a career choice: The impact of locus of control on aspiring entrepreneurs' opportunity recognition. *Journal of Business Research, 98*, 227-235. https://doi.org/10.1016/j.jbusres.2019.02.006

Babatunde, E. B. and Durowaiye, B. E. (2014). The impact of entrepreneurship education on entrepreneurial intentions among Nigerian undergraduates. *Impact Journals*, *2*(1), 15-26.

Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice, 38*(2), 217–254. https://doi.org/10.1111/etap.12040

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* Freeman.

Baum, J. R. and Locke, E. A. (2004). The relationship of entrepreneurial traits, skills and motivation to subsequent venture growth. *Journal of Applied Psychology*, *89*(4), 587-598.

Brockhaus, R. H. (1980). Risk-taking propensity of entrepreneurs. *Academy of Management Journal, 23*(3), 509–520. https://doi.org/10.2307/255515

Bux, S. R. and Honglin, Y. (2015). Analyzing the impact of the psychological characteristics on entrepreneurial intentions among university Students. *Advances in Economics and Business*, *3*(6), 215-224

Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing, 13*(4), 295–316. https://doi.org/10.1016/S0883-9026(97)00029-3

Farrukh, M., Wei Ying, C., & Abdallah Ahmed, N. O. (2016). Entrepreneurial intention: The mediating role of self-efficacy in the theory of planned behaviour. *Journal of Entrepreneurship in Emerging Economies, 8*(2), 72–87. https://doi.org/10.1108/JEEE-05-2015-0033

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Gbadamosi, A. (2020). Entrepreneurial intentions and risk tolerance among Nigerian undergraduate students. *African Journal of Economic and Management Studies, 11*(3), 371–388. https://doi.org/10.1108/AJEMS-07-2019-0271

Gikunda, K. K. and Miriti, G. M. (2025*). Effect of risk-taking propensity on entrepreneurial intentions among students undertaking entrepreneurial courses in universities in Meru and Tharaka Nithi counties. International Journal of Research and Innovation in Social Science, 9*(1), 243–250.

Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education + Training, 48*(1), 25–38. https://doi.org/10.1108/00400910610645221

Ilevbare, F. M., Ilevbare, O. E., Adelowo, C. M. and Oshorenua, F. P. (2022). Social support and risk-taking propensity as predictors of entrepreneurial intention among undergraduates in Nigeria. *Asia Pacific Journal of Innovation and Entrepreneurship, 16*(2), 90-107.

Inegbenebor, A. U. (2014). Business education and entrepreneurial orientation in Nigerian universities. *Journal of Education and Practice, 5*(14), 87–95.

Iro-idoro, C. B. and Iro-Idoro, E. U. (2016). Effect of entrepreneurship education, creating and self-efficacy on entrepreneurship interest in vocational students. *Journal of Advances in Economics, Business and Management Research*, *97*, 272-277.

Karabulut, A.T. (2016). Personality traits on entrepreneurial intention, *Procedia- Social and Behavioral Sciences*, *229,* 12-21. https://doi.org/10.1016/j.sbspro.2016.07.109

Karimi, S., Biemans, H. J. A., Lans, T., Chīzari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management, 54*(1), 187–209. https://doi.org/10.1111/jsbm.12137

Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development, 5*(4), 315–330. https://doi.org/10.1080/08985629300000020

Krueger, N. F., Reilly, M. D., and Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.

Ladokun, I. O., Onimole S. O. and Olowu A. U. (2022). Personality traits and entrepreneurial intention among undergraduate students in selected tertiary institutions in Southwest, Nigeria. *African Journal of Management and Business Research, 3*(1), 94 – 104. Retrieved from https://publications.afropolitanjournals.com/index.php/ajmbr/article/view/74

Liñán, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice, 33*(3), 593–617. https://doi.org/10.1111/j.1540-6520.2009.00318.x

Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual Review of Organizational Psychology and Organizational Behavior, 4*, 339–366. https://doi.org/10.1146/annurev-orgpsych-032516-113324

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge.* Oxford University Press.

McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship Theory and Practice, 33*(4), 965–988. https://doi.org/10.1111/j.1540-6520.2009.00304.x

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science, 29*(7), 770–791. https://doi.org/10.1287/mnsc.29.7.770

Moa-Liberty, A.W., Tunde, A.O. and Tinuola, O. L. (2016). *The influence of self-efficacy and socio-demographic factors on the entrepreneurial intentions of selected Youth Corp members in Lagos, Nigeria.* In: Szymańska, D. and Biegańska, J. editors, Bulletin of Geography. Socio-economic Series, No. 34, Nicolaus Copernicus University Press, (34), 63–71.

Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U. and Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of career development, 39*(2), 162-185.

Newman, A., Obschonka, M., Schwarz, S., Cohen, M. and Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of vocational behavior, 110*, 403-419.

Ngo, T. T. and Vu, T. H. (2025). The impacts of psychological capital, risk-taking propensity, and entrepreneurial competence on the sustainability performance of SMEs. *Cogent Business & Management, 12*(1). https://doi.org/10.1080/23311975.2025.2466810

Nwosu, B. O. (2017). Cultural dimensions of Igbo entrepreneurship in South-East Nigeria. *International Journal of African Development, 4*(2), 45–62.

Ogwunte, P. C. (2023). Perceived effects of entrepreneurial mindset on business education students' entrepreneurial intentions in Rivers State University. *Journal of Business and Entrepreneurship Education* (JOBEE), ISSN: 2536-7021, *2*(1),95-105.

Ojapinwa, A.F., Fapohunda, T.M., Jayeoba, F.I (2018). Entrepreneurship skills development, risk-taking propensity and students' self- employment intention. *LASU Journal of Employment Relations & Human Resource Management, 1*(1) 82-93. https://doi:10.36108/ljerhrm/8102.01.0101

Otache, I., Edopkolor, J. E., Sani, I. A. and Umar, K. (2024). Entrepreneurship education and entrepreneurial intentions: Do entrepreneurial self-efficacy, alertness and opportunity recognition matter? *The International Journal of Management Education, 22*(1), 100917.

Othman, N. and Mohd Hisam, N. S. (2020). *Entrepreneurial self-efficacy and entrepreneurial intention among polytechnic* Business education undergraduates' *ic students involved and not involved in entrepreneurship education. Universal Journal of Educational Research, 8*(10), 4406–4415. https://doi.org/10.13189/ujer.2020.081007

Oyedele, O., Oyelaran, O., & Adeyemi, S. (2019). Psychological determinants of entrepreneurial intentions among Nigerian graduates. *Journal of Entrepreneurship in Emerging Economies, 11*(4), 476–495. https://doi.org/10.1108/JEEE-08-2018-0086

Pan, L. and Tresirichod, T. (2025). The impact of personality traits on entrepreneurial self-efficacy and intention among private university students: Gender as a moderating variable. *Humanities and Social Sciences Letters, 13*(1), 214–233. https://doi.org/10.18488/73.v13i1.4048

Piperopoulos, P. and Dimov, D. (2015) Burst bubbles or build steam? Entrepreneurship education, entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Small Business Management*, *53*(4)970 - 985. ISSN 0047-2778 https://doi.org/10.1111/jsbm.12116

Setiawan, A., Nugraheni, E. Y., Rahmattullah, M., Salsa Bella, T. A. and Elyani, H. (2023). *The influence of risk propensity, entrepreneurial intentions, and entrepreneurial self-efficacy on entrepreneurial behavior among students. Journal of Economics Education and Entrepreneurship*, *4*(2), 134–146.

Shapero, A. and Sokol, L. (1982). *The social dimensions of entrepreneurship*. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), Encyclopedia of entrepreneurship (72-90). Englewood Cliffs, NJ: Prentice-Hall.

Sharma, S., Khandelwal, N. K. and Mehta, A. (2024). An empirical study of factors contributing to entrepreneurial intention among students of higher education institutes. *Journal of Entrepreneurship and Innovation in Emerging Economies, 11*(1), 88 – 101. https://doi.org/10.1177/23939575241252033

Sitkin, S. B., & Pablo, A. L. (1992). Reconceptualizing the determinants of risk behavior. *Academy of Management Review, 17*(1), 9–38. https://doi.org/10.2307/258646

Stewart, W. H., & Roth, P. L. (2001). Risk propensity differences between entrepreneurs and managers: A meta-analytic review. *Journal of Applied Psychology*, *86*(1), 145–153. https://doi.org/10.1037/0021-9010.86.1.145

Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable instrument. *Journal of Business Venturing*, *24*(3), 284-307.

Udayanan, P. (2019). The Role of Self-Efficacy and Entrepreneurial Self-Efficacy on the Entrepreneurial Intentions of Graduate Students: A Study among Omani Graduates. *Entrepreneurial Business and Economics Review, 7*(4), 7-20. https://doi.org/10.15678/EBER.2019.070401

Veciana, J. M., Aponte, M., & Urbano, D. (2005). University students' attitudes towards entrepreneurship: A two countries comparison. *International Entrepreneurship and Management Journal, 1*(2), 165–182. https://doi.org/10.1007/s11365-005-1127-5

Vijeyan, S., ShishiKumar, P. and Zahir, O. (2015). Impact of psychological traits, entrepreneurial education and culture in determining entrepreneurial intention among pre-university students in Malaysia. *American Journal of Economics*, *5*(2) 163-167

Yusof, W. N. H. S. W., Zainol, F. A. and Daud, W. N. W. (2018). *Entrepreneurial intention revisited: The role of entrepreneurial self-efficacy. International Journal of Academic Research in Business and Social Sciences*, *8*(12), 95–107. https://doi.org/10.6007/IJARBSS/v8-i12/5209

Zhang, D.C., Highhouse, S. and Nye, C. D. (2018). General risk propensity scale (GRiPS). *Journal of Behavioural Decision Making*. https://doi.org.10.1002/bdm.2102

Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology, 90*(6), 1265–1272. https://doi.org/10.1037/0021-9010.90.6.1265